Manitoba Monthly Communicable Disease Report

Reported up to November 30, 2009

Highlights:

1. **Antimicrobial Resistant Organisms**
   Together Methicillin-resistant *Staphylococcus aureus* (MRSA) and *Clostridium difficile* (*C. difficile*) accounted for 74% of all non-STI/HIV related communicable diseases reported to Manitoba Health during November 2009.

   - The number of reported cases of MRSA was above the statistically expected range in November 2009 – 277 positive lab-confirmed cases reported; less than 272 expected in an average month.

2. **Sexually Transmitted Infections (STI) & Blood-Borne Pathogens (BBP)**
   There were 541 reported cases of sexually transmitted infections (chlamydia, gonorrhoea, and syphilis) in November 2009:
   - 470 reported cases of chlamydia (Ct) only
   - 33 reported cases of gonorrhoea (GC) only
   - 33 reported co-infections of Ct and GC and
   - 5 reported cases of syphilis

   Chlamydia has the highest incidence of reported STI. Females between the ages of 15 and 24 years comprised 40% of all reported chlamydia cases in the province.

   In November 2009, there were no cases of Hepatitis B virus (HBV), 16 cases of Hepatitis C virus (HCV) and 5 cases of HIV newly reported in Manitoba.

3. **Other Communicable Diseases**
   The number of reported cases in November 2009 was within or below the statistically expected range for these reported communicable diseases with the exception of the following diseases:

   - Diphtheria Carrier – 2 positive lab-confirmed cases reported; less than 2 expected in an average month.
   - Pneumococcal Septicemia – 18 positive lab-confirmed cases reported; less than 17 expected in an average month.

   The expected number of cases and range is statistically based on the number of reported cases during October, November, and December, 2004-2008.

Explanatory Notes:

General:

Each monthly communicable disease report includes the number of cases of notifiable communicable diseases reported by lab or health provider during each individual month. Data for the monthly summary are aggregated based on the earliest of: symptom onset date, specimen collection date, or report date. For the majority of cases, the date used will be the specimen collection date as symptom onset date is frequently not recorded. Some discrepancy of numbers may be based on reporting delays.

The observed numbers of cases are compared to the statistically expected range for each reportable communicable disease. This involves comparing the current month's case counts to the average case counts for the same month, one month subsequent and one month prior for the previous five years. These same months over the five years are used to determine the expected range of cases using the statistical calculation of standard deviation. Using this specific monthly pattern allows for adjustment within the statistics for both seasonality and cyclical disease patterns.

The year-to-date case counts are based on the calendar year.

The disease data reported in the monthly report has not been analyzed for severity or associated deaths at this time.

Disease specific information:

Methicillin-resistant *Staphylococcus aureus* (MRSA) positive results within Manitoba include both individuals who are symptomatic of infection and colonized individuals who have no symptoms and are mostly diagnosed during admission screening activities at facilities. If facilities increase their screening activities, it would usually result in a rise in colonized MRSA cases.

A new case of Hepatitis C Virus (HCV) infection is defined as a first positive test for an identifiable individual.

A new case of Human Immunodeficiency Virus (HIV) infection is defined as a positive test with a unique code that has not been previously linked to a positive test result in Manitoba. Positive HIV tests included in this month's statistics include both nominal and non-nominal testing results.

SUMMARY OF COMMUNICABLE DISEASE FOR NOVEMBER 2009

		MONTHLY TOTAL				YEAR-TO-DATE	
ICD9	Disease Name	2008	2009	Expected*	Ex. Range**	2008	2009
006.9	AMEBIASIS	3	1	3	0-7	32	38
022	ANTHRAX				***		
127.0	ASCARIASIS			0	0-2		
005.8	B. CEREUS			0	0-1	1	5
320.1	BAC. MENINGITIS - PNEUM			0	0-1	2	4
320.7	BAC.MENINGITIS-LISTERIA				***		
038.0	BETA STREP SEPTICEMIA	10	8		***	129	140
116.0	BLASTOMYCOSIS	1			***	17	7
005.1	BOTULISM				***		
023	BRUCELLOSIS			0	0-1		1
005.2	C. PERFRINGENS	1		1	0-2	1	3
008.43	CAMPYLOBACTER	11	9	18	5-31	215	222
558.2	CLOSTRIDIUM DIFFICILE	80	65		***	813	766
046.1	CREUTZFELD-JACOB DISEASE				***	1	3
007.8	CRYPTOSPORIDIOSIS	4	1	3	0-9	70	36
061.0	DENGUE FEVER			0	0-0	1	
065.4	DENGUE HEMORRHAGIC FEVER			0	0-0		
V02.4	DIPH.CARRIERS		2	0	0-1	5	3
032	DIPHTHERIA CASES			0	0-1	1	
123.4	DIPHYLLOBOTHRIUM SPP	1		1	0-2	6	4
008.0	E. COLI-VEROTOXIGENIC	3	3	4	0-18	35	41
054.3	ENCEPHALITIS			0	0-1		
005.9	FOOD POISONING OTHER			0	0-1		
007.1	GIARDIA LAMBLIA	4	11	9	2-16	120	122
320.0	H.INFLUENZAE (CSF)			0	0-1		
041.5	H.INFLUENZAE (OTHER STERILE)			0	0-1	3	3
041.59	HAEM. INFLUENZAE (non-B)	4			***	16	1
480.8	HANTA VIRUS			0	0-0		
283.11	HEMOLYTIC UREMIC SYNDROME			0	0-1		
070.1	HEPATITIS A			1	0-2	10	11
070.3	HEPATITIS B			0	0-1	4	4
070.51	HEPATITIS C	25	16	31	18-44	315	312
487.1A	INFLUENZA A (NON-pH1N1)****		6		***	78	156
487.1B	INFLUENZA B				***	44	38
482.83	LEGIONELLA	1		0	0-1	1	
085.9	LEISHMANIASIS			0	0-0		
030.9	LEPROSY			0	0-0		
027.0	LISTERIA MONOCYTOGENES			0	0-1	5	2
88.81	LYME DISEASE			0	0-1	5	1
084	MALARIA	1	3	1	0-3	11	11
055.9	MEASLES			0	0-0		
036.0	MENINGOCOCCAL CSF			0	0-1	2	
036.82	MENINGOCOCCAL ARTHROPATHY				***		
036.2	MENINGOCOCCEMIA BLOOD			0	0-1	2	
B95.6	MRSA	193	277	159	47-271	2280	2552
072.9	MUMPS	1		0	0-1	2	5
036.89	N.MENINGITIDIS OTHER			0	0-0		7
728.86	NECROTIZING FASCIITIS	1		2	0-5	17	3
729.1	NECROTIZING MYOSITIS				***		
323.9	OTHER ENCEPHALITIS			0	0-0		
033.1	PARAPERTUSSIS				***		2
033.0	PERTUSSIS	1	4	3	0-11	16	29
038.2	PNEUM. SEPTICEMIA	9	18	8	0-16	107	117
073.9	PSITTACOSIS			0	0-0		

* Mean of 15 month totals from previous, comparable, and subsequent months for the past 5 years.

** Mean +/- 2 standard deviations of the mean.

*** Data collected for less than 5 years.

**** Excludes Influenza A Pandemic H1N1 (pH1N1). There were 1436 cases of pH1N1 in November 2009.

SUMMARY OF COMMUNICABLE DISEASE FOR NOVEMBER 2009

		MONTHLY TOTAL				YEAR-TO-DATE	
ICD9	Disease Name	2008	2009	Expected*	Ex. Range**	2008	2009
083.0	Q FEVER			0	0-0	1	1
056.9	RUBELLA			0	0-0		2
771.0	RUBELLA CONGENTIAL			0	0-0		
041.2	S.PNEUM.OTHER	1		1	0-3	3	10
003.0	SALMONELLA	13	13	13	2-24	224	244
120	SCHISTOSOMIASIS			0	0-1		1
004	SHIGELLOSIS			1	0-5	28	19
050.9	SMALLPOX				***		
005.0	STAPH FOOD POISON			0	0-0		
785.5	STAPH TOXIC SHOCK				***	2	
481.9	STREP PNEUMONIA - PR			0	0-1	1	
041.1	STREP PYOGENES - OTHER STERILE	7	3		***	43	94
711.0	STREP.PNEUM.ARTHRITIS			0	0-0		
580.0	STREPT GLOMERULONEPHRITIS			0	0-0		
040.89	STREPT TOXIC SHOCK			0	0-1		
481	STREPTOCOCCUS PNEUMONIAE			0	0-0	2	
127.2	STRONGYLOIDES	1	1	1	0-5	6	11
037	TETANUS			0	0-0		
130.9	TOXOPLASMOSIS			0	0-1		1
124	TRICHINOSIS			0	0-0		
086	TRYPANOSOMA CRUZI			0	0-0		
013	TUBERCULOSIS - NON-RESP.	2	3	2	0-4	20	27
010	TUBERCULOSIS - PRIM.	1		1	0-3	6	9
011	TUBERCULOSIS - RESP	3	9	7	1-13	97	116
021.9	TULAREMIA			0	0-1	1	1
002.0	TYPHOID			0	0-0	1	2
081.9	TYPHUS			0	0-0		
B96.8	VANCOMYCIN R. ENTEROCOCCI	14	11		***	80	88
005.4	VIBRIO PARAHAEMOLYTICUS				***		
070.59	VIRAL HEP. OTHER				***		
B95.7	VRSA			0	0-0		
062.1	W. EQUINE ENCEPHALITIS			0	0-0		
066.41	WNV NEUROLOGICAL SYNDROMES				***	2	
008.44	YERSINIA ENTEROCOLITICA	1	1	1	0-2	14	8
		397	**465**			**4898**	**5283**

SUMMARY OF COMMUNICABLE DISEASE BY AGE AND GENDER FOR NOVEMBER 2009

		<1		1-4		5-9		10-14		15-19		20-24		25-29		30-39		40-49		50-59		60-69		70-79		80+		Missing Age/Gender	Total
ICD9	Disease Name	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M		
006.9	AMEBIASIS													1															1
038.0	BETA STREP SEPTICEMIA								1											1	1	1	3				1		8
008.43	CAMPYLOBACTER							2			1		1					1	1			1	1		1				9
558.2	CLOSTRIDIUM DIFFICILE			1								1		3	1		2	2	1	6	2	3	5	6	8	14	10		65
007.8	CRYPTOSPORIDIOSIS									1																			1
V02.4	DIPH. CARRIERS																2												2
008	E. COLI 0157			1			1												1										3
007.1	GIARDIA LAMBLIA			2	2	1	1		1					1		2							1						11
070.51	HEPATITIS C									1						1	3	1	3		4	1			1			1	16
487.1A	INFLUENZA A (NON-pH1N1)											1		1	1	1					2								6
084	MALARIA									1	1								1										3
B95.6	MRSA	8	7	20	17	17	4	9	5	8	7	6	7	12	12	16	19	10	21	6	9	7	14	6	11	8	11		277
033.0	PERTUSSIS	1		2								1																	4
038.2	PNEUM. SEPTICEMIA		1		3					1			1			1	2	1	1	1	2	1	1		1		1		18
003.0	SALMONELLA		1		1	3						1		1				1	1	1	1	1				1			13
041.1	STREP PYOGENES - OTHER ST											1				1					1								3
127.2	STRONGYLOIDIASIS														1														1
013	TUBERCULOSIS - NON-RESP.															1		1			1								3
011	TUBERCULOSIS - RESP										1						1	1	2		1		1		2				9
B96.8	VANCOMYCIN RES. ENTER.																				1			3	1	3	3		11
008.44	YERSINIA ENTEROCOLITICA					1																							1
		9	9	26	23	22	6	11	7	12	10	11	9	19	15	23	29	18	32	15	25	15	26	15	25	26	26		465

SUMMARY OF COMMUNICABLE DISEASE BY REGION (RHA) FOR NOVEMBER 2009

ICD9	Disease/Infection	Winnipeg	Brandon	N. Eastman		S. Eastman		Interlake		Central		Assiniboine		Parkland		Norman		Burntwood		Churchill	OOP	Missing	TOTAL
*Case Referred to:**				*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*				
006.9	AMEBIASIS	1																					1
038.0	BETA STREP SEPTICEMIA	5		1														2					8
008.43	CAMPYLOBACTER	5			1		1		1						1								9
558.2	CLOSTRIDIUM DIFFICILE	40	3		1		3		5		5		5		1			1			1		65
007.8	CRYPTOSPORIDIOSIS										1												1
V02.4	DIPH. CARRIERS																	2					2
008	E. COLI 0157	1					1				1												3
007.1	GIARDIA LAMBLIA	5			1		5																11
070.51	HEPATITIS C	8	1								3		2				1		1				16
487.1A	INFLUENZA A (NON-pH1N1)	3			1						2												6
084	MALARIA	3																					3
B95.6	MRSA	74	3	5	1		3	1	8	1	3	1	6	2	6	3	11	140	8		1		277
033.0	PERTUSSIS												4										4
038.2	PNEUM. SEPTICEMIA	7	1		3						1		1	1			1	3					18
003.0	SALMONELLA	6						1			2				1	1			2				13
041.1	STREP PYOGENES - OTHER ST	2																1					3
127.2	STRONGYLOIDIASIS	1																					1
013	TUBERCULOSIS - NON-RESP.	1									1							1					3
011	TUBERCULOSIS - RESP	7				1												1					9
B96.8	VANCOMYCIN RES. ENTER.	8						1	1		1												11
008.44	YERSINIA ENTEROCOLITICA	1																					1
		178	8	6	8	1	13	3	15	1	20	1	18	3	9	4	13	151	11		2		465

* F=Federal Jurisdiction (First Nations and Inuit Health) P=Provincial Jurisdiction OOP=Out of Province

STD Infection Summary Report - November 2009

DISEASE/INFECTION	MONTHLY TOTAL		YEAR-TO-DATE	
	2008	2009	2008	2009
All Chlamydia Infections	555	503	6432	5939
All Gonorrhea Infections (including PRNG)	86	66	1285	990
All Syphilis Infections	4	5	57	45
Gonorrhea & Chlamydia Co-infections	40	33	575	413
HIV	8	5	85	99

Total Number of STD Cases by Age and Gender - November 2009

Disease Name	<1		1-4		5-9		10-14		15-19		20-24		25-29		30-39		40-49		50-59		60-69		70-79		80+		Missing age/gender	TOTAL
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M		
Chlamydia Only Cases	1						10	1	104	37	83	53	50	48	38	23	8	8	4	2								470
Gonorrhea Only Cases							1		4	1	8	7	1	3	1	2	1	1	1	2								33
Syphilis Only Cases											1					2									2			5
GC and CT Cases									10	2	4	4	3	3		3	1	2		1								33
	1						11	1	118	40	96	64	54	54	39	30	10	11	5	5					2			541
HIV									1				1				2	1										5

Regional STD Distribution - November 2009

Disease/Infection	Winnipeg	Brandon	N. Eastman		S. Eastman		Interlake		Central		Assiniboine		Parkland		Norman		Burntwood		Churchill	OOP	Missing	TOTAL
*Case Referred to:**			F	P	F	P	F	P	F	P	F	P	F	P	F	P	F	P				
All Chlamydia Infections	256	28	7	4		12	9	13		29		15	2	9	8	19	62	28		2		503
All Gonorrhea Infections	30	1	4	3				1		2		1		1	3	4	11	5				66
All Syphilis Infections	4	1																				5
GC and CT Infections	14		1	1				1				1			1	3	8	3				33

* F=Federal Jurisdiction (First Nations and Inuit Health) P=Provincial Jurisdiction OOP=Out of Province